

WHAT IS CLAIMED IS:

1. A composition for use as an electrophoretic medium comprising:

- an electrophoretic gel;
- a polymerization initiator;
- a buffer; and
- an adhesive agent allowing adhesion of polymerized electrophoretic medium onto a surface of an thermoplastic electrophoretic cassette.

2. A composition according to claim 1 wherein the gel comprises acrylamide gel, optionally cross-linked, agarose gel or starch gel; the polymerization initiator comprises ammonium persulfate and N,N,N,N-tetramethylethylenediamine (TEMED); 4-dimethylaminopropionitrile; 1-hydroxycyclohexyl phenyl ketone; 2,2-diethoxy-acetophenone; 2,2-dimethoxy-2-phenylacetophenone; 2',4'-dimethoxyacetophenone; 2-hydroxy-2-methyl-1-propiophenone; 2-hydroxy-2-methyl-1-phenylpropan-1-one, and mixtures thereof; the buffer comprises tris-borate EDTA, tris-acetate-EDTA, tris-glycine, tricine, or mixtures thereof; and the adhesive agent comprises at least one tetra-substituted silicon derivative wherein the substituents are the same or different and comprise a straight or branched alkyl, alkoxy, ketone, ester or amide each comprising from 1 to 8 carbon atoms, amino, halogen, cyano or hydroxy.